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## Health Tracts.—No. 2.

# HOW TO PREVENT CONSUMPTION.

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House I Live in, Young Man's Guide, &c.

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## HOW TO PREVENT CONSUMPTION.

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GENERAL REMARKS.—Of all the various punishments which a wise, and good, and merciful Father in heaven has seen fit to employ, to bring back to strict obedience to all his laws, natural and revealed, his erring creatures, none seems to us more striking than that wide wasting disease, pulmonary consumption. Hardly any climate affords entire exemption from its ravages, though it is unquestionably much more common in some countries than in others. Nor is it wholly confined to particular age, constitution, sex or circumstances. It is a scourge of transgression wherever transgression exists, especially in our own country. Few parts of the world, if we except perhaps Great Britain, are more exposed to its terrible inroads than the United States; and, in particular, New England.

FATALITY OF CONSUMPTION.—The annual number of deaths in the United States from consumption has been variously estimated. Some suppose it not to exceed 40,000; while others place the number as high as 80,000. One reason for this diversity of opinion is found in the fact, that some forms of consumptive disease are not included in the estimate of one individual, while they are

embraced by that of another. Thus there is a wasting disease of drunkards, in which, after the liver and stomach are destroyed, the lungs participate largely in the suffering. So frequent are these cases, that if reckoned as cases of consumption, they make a yearly difference, in the aggregate, of many thousands.

We have supposed ourselves safe in placing the annual mortality of the United States, from consumption, at 50,000; or 1,000,000 for every twenty years. That of New England alone is about 8,000; or in twenty years, 160,000.

Now if the plague, or the cholera, or any other fell destroyer, were to sweep from the United States, once in twenty years—and that, too, in a very short season—say four or six months—a million of its inhabitants, what mourning, lamentation, and woe, would be heard from every corner of the land! If no one complained of anything else, he would murmur at our sickly, wretched climate, as fit only for the wild beasts of the forest—hardly for them. True, the murmuring would cease before the expiration of each intervening period of nineteen years and a half, but it would be revived and reiterated when the scourge was repeated. In like manner, if 160,000 of our hardy New Englanders were to be swept away suddenly by some terrible pestilence every twenty years, who would not tremble?

Or, again; if some yearly pestilence, like the breath of the sirocco, were to destroy, in a few weeks, 50,000 persons in the United States, and 8,000 in New England alone, what should we say of the health of the country?

Or once more; suppose, every year, some malignant epidemic should destroy, in the course of a few days, or even a few weeks, 300 persons in Boston, 75 in Providence, 100 in Albany, 1000 in New York, 600 in Phila-

delphia. 300 in Baltimore, and from 40 to 50 in our smaller cities of from 10,000 to 15,000 inhabitants—which is believed to be about a fair estimate of the average annual number of deaths from consumption. Suppose it were not confined to our cities, however, but to extend its visits to every township, taking away from each township of 2000 inhabitants its 8 or 10 individuals; from each of 4000 its 15 to 20, and so on. What complaints of a deadly climate, &c., should we not continually hear?

But is the mortality less dreadful because it comes not at stated seasons? Is it any less alarming that Boston should lose 25 or 30 inhabitants upon an average, every month, or nearly one a day, than that it should lose 300 or more once a year, and that, too, in the compass of only a few weeks or days? Why should New York be more alarmed at the loss of three inhabitants a day for every day in the year, than at the sudden invasion of a disease which should sweep away 1095 in a week, and then disappear for the year? Why should a township of 5000 inhabitants make a greater outcry at the annual return of a malady, that should sweep away 25 or 30 in a few days, and then disappear, than at a more insidious but equally deadly foe, that should destroy upon the average two every month?

We press these inquiries, because we wish every one to perceive the extent of the malady of which we are treating, that he may feel the full force of our remarks on the importance of well directed efforts to prevent it. Were a yearly pestilence to destroy in one week, or even in several weeks, as many of our inhabitants as are now destroyed slowly by consumption, and were an individual to come forward, and devise, and carry into execution, measures for diminishing its mortality only one half, he would be considered the benefactor of his country and of

his race. Now we are about to *propose* means and measures, which, if universally employed and carried into execution, would save much more than half the annual mortality from consumption. They are not new; but they are not therefore the less important. Nor are they less valuable, because instead of inventing or originating them, we only point to them, and press them on the public attention as others have done before us.

MEANS OF PREVENTION.—The appropriate means and measures for preventing consumption are exceedingly numerous. We shall present a few of the leading or principal ones only; and those will be treated as briefly as the nature of the case will admit.

1. *Health of Parents.*—Whatever promotes the general health of parents, does so much towards preventing pulmonary consumption. For though the debility of parents, however induced, does not, in every instance, predispose children to this particular form of disease, there is no certainty that it may not. Indeed, it would seem to be a most remarkable fact, that the strumous or scrofulous constitution now become so common among children—a state of constitution which is closely allied, if indeed it does not lead directly to pulmonary consumption, since it is commonly attended by tubercles, the seeds of consumption—appears to increase just in proportion to the progress of intemperance, gluttony and vice, and other causes of parental loss of health and vigor.

That this is the unhappy state of things in this country, especially in our manufacturing and densely populated towns and cities, and wherever there are what are called flourishing schools, is the testimony of our most observing physicians; and that it is so in a degree still more striking in those other countries in whose footsteps we are rapidly following, is fully asserted by all those

who have made the causes of disease, and especially of consumption, a favorite object of study. From a treatise on Pulmonary Consumption, by Dr. James Clark,\* we copy the following remarkable sentiments :

“ Parents may transmit the tuberculous constitution to their children. Every member of the profession, by observing what is daily passing before him, may see numerous proofs of the truth of this statement. He will find many children presenting the tuberculous constitution, while no traces of it are to be observed in the parents. The children of those who have suffered long from dyspeptic complaints, gout, cutaneous affections, *or any other form of chronic disease, originating in derangement of the digestive function which has produced an influence on the constitution*, are very frequently the subjects of scrofula, or of disorders which dispose to and ultimately induce tuberculous cachexiæ.” [By tuberculous cachexiæ, is meant a habit of body in which tubercles or the seeds of consumption prevail.]

But Dr. Clark is still more particular. Not only gout, cutaneous or skin diseases, and a disordered state of the digestive organs, induce the tuberculous habit in children, but the “injurious influence of mercury on the system” of the parent, debility from disease, age, &c.; in short, a deteriorated state of health in the parent from any cause.” We beg the reader to note this testimony of Dr. C. with particular care. If any cause whatever which goes to deteriorate the health of the parent, will predispose his children to tubercles, and of course to pulmonary

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\* We do not quote from the writings of Dr. Clark, because he happens to have been consulting physician to the king and queen of Belgium, and physician to Queen Victoria, but because his work, besides being the most recent, is considered by our medical men as one of the most valuable on the subject of which it treats which can be found in the English language.



consumption ; and if it is a fact, that the daily dosing and drugging which exists everywhere, debilitates us, are we to wonder if we find everywhere, and in almost all our children, the seeds of consumption ? And if one death in five throughout the greater part of New England is, at present, from consumption, and one in three or four in Great Britain, are we to wonder if the proportion of deaths from this cause—unless we reform—should, in sixty or seventy years more, be doubled ?

Dr. Clark says further—"According to my observation, we never see the parents in an unhealthy state, *whatever may be its nature*, without finding at the same time, that their children are strongly disposed to tuberculous disease." And, finally, in attempting to explain, most clearly, why the mischief should be more extensive still, and why many children should be found tuberculous, while the parents appeared generally healthy, he observes that a disordered state of the mother's health, depressing passions, a sedentary or unhealthy mode of life, or whatever induces imperfect nutrition in the mother, during gestation, may lead to such terrible results.

"It is a very common opinion," he says, "that during this period of a mother's life, a fuller and more stimulating diet is required than that to which they have been accustomed ;" whereas, as a general rule, "the more plain and simple the diet—the more sparingly stimulants of all kinds are used—so much the better for both mother and child." The mother should not forget, for a moment, that whatever mode of living is most conducive to her own health, is the best guaranty for that of her infant.

We cannot write these pages without emotion. We see society everywhere degenerating—independently of the tendency everywhere to this particular form of disease, the consumption—because the circumstances to which Dr. C. alludes, are everywhere overlooked and



practically disregarded. On this account, to use once more his own language, "the race often terminates"—that is, the family stock—in the third generation. We close this part of our subject, by entreating all parents, to whom these pages may come, to heed them; and by one more extract from the distinguished author to whom we are already so largely indebted.

"In order effectually to prevent the extension of tuberculous disease, we must, in the first place, direct our attention to the state of the parents. *Were parents, in general, convinced that the health of their children depended chiefly on the integrity of their own health*, a beneficial effect might be produced upon society at large, and especially on the members of scrofulous families. If a more healthy and natural mode of living were adopted, [one at any rate which should exclude from our tables the long list of medicinal substances often found there,] and if more consideration were bestowed upon matrimonial alliances, the disease which is so often entailed upon their offspring might not only be prevented, but even the predisposition to it extinguished in their families in the course of a few generations."

2. *Health of Children*.—Some may smile at the bare suggestion of the idea, that one means of preventing consumption in an individual is to secure and preserve his health. Every one, it will perhaps be said, knows this, without any information on the subject.

But is it so, after all? Is there not a sort of indefinite notion abroad, that good health is not a security against disease? True, indeed, every one knows that as long as a person is in health, he is not sick; and were we merely to say this, we might justly be regarded as trifling with our readers. But we mean much more. Is there not a general belief in our community, that firm health invites disease, instead of repelling it? If not, what then

means the common remark in regard to fevers and epidemic diseases in general, that they seize upon and go hardest with the most healthy? What means the saying, that the healthiest children are most likely to be attacked with croup, troubled with worms, &c.? What means, too, the saying, in reference to the victims of consumption in particular, which has been repeated till it has passed into a maxim, that death delights in or loves a "shining mark?"

We are hardly willing to stop here to combat a belief which seems to us so very absurd as to carry its own refutation on the face of it. The very idea that the most healthy are most liable to be sick, or that health invites or encourages disease, and renders it more fatal, is in the very nature of things, a contradiction in terms. It cannot be so; it certainly is not so.

The mistake may have arisen, in part at least, from the fact that many individuals, children and adults, who appear fat and have red cheeks, have become the subjects of severe disease. Fat children, it is well known, are most liable to croup and several other diseases. Fat adults, too, are peculiarly liable to some forms of disease. And both children and adults, who have red cheeks, and of whom it is so often said they are the very picture of health, most commonly labor under disease of some of the internal organs. The robust, healthy looking laborer, especially the farmer, is often found, in consequence of his bad habits, and notwithstanding his external appearance, to have a beginning liver complaint or gout preying upon him. Such is the health of people who are said to be so very healthy; and yet are so much exposed to be taken violently sick, and to die. Such are the "shining marks" at which death delights to aim.

Now the plain matter of fact is, that the best preventive of disease, in all the circumstances and conditions of

life, from infancy to age, is good health. Let us labor to secure this, and just in proportion to our success will be our immunity from disease. The perfectly healthy person, whether child or adult, need not fear disease; no, not even the cholera, the plague, or the small pox. It is our unhealthiness, or rather our imperfect health, that invites these and all diseases. Even when we look healthy externally, if our habits are bad, there is often mischief within; disease of some of our vital organs; a worm at the root. We repeat the sentiment, for it is an important one; it is as impossible for a person who is perfectly healthy—were there any such person among us—to be taken suddenly sick, even with epidemic or contagious disease, as it is for fermentation suddenly to take place in mere sand, or pebbles, or ice; or for putrefaction to take place instantly in rock salt or rock crystal. But let the human system be properly prepared to be wrought upon by disease, and then let contagious matter, or any other cause of disease be introduced, and like yeast or leaven introduced into a parcel of meal, it will find foothold, and the whole mass ere long be changed.

While, therefore, we have been endeavoring to show that the diseases of parents, such as skin affections, gout, dyspepsia, intemperance—anything, in short, which at any period of their lives previous to their becoming parents, even the taking of poisonous medicine—predisposes their offspring to scrofula and consumption, we ought also to say, with equal confidence, that the same diseases, or anything else which induces debility in the same way on the children themselves, will favor the development of consumption in them. It *may* do so, if they are not predisposed to it, either constitutionally or otherwise; it *will* do so, inevitably, if they are thus predisposed. Let parents, then, remember this great truth, and govern themselves accordingly. Let them study to

form, in their children, healthy physical habits ; and let them be the more earnest in the matter, in proportion as their own course has been more erratic, and as their own health has become impaired as the consequence.

3. *Exemption from Colds.*—Perhaps the most fruitful particular source of consumption, is the habit of taking cold. We call it a *habit*, because we regard it as such entirely. We no more believe it necessary for people, did they obey the laws of God throughout, to be perpetually suffering, as many persons are, from cold, and withal laying the foundation of other diseases still more troublesome—not to say dangerous and fatal—than it is for them to have the small pox, or the typhus fever.

Here we come once more to a thought which perpetually harasses us, and, as it were, paralyses every exertion. We allude to the utter skepticism which prevails in the community—enlightened as it professes to be—in regard to the power which mankind possess to prevent disease. There is, somehow or other, a deep sentiment everywhere prevailing, which counteracts all our teachings to the contrary, and which, notwithstanding all we have said, will be likely to haunt many of our readers, that diseases are sent upon us ; that they are not the natural consequences of our misdeeds ; that they are, in one word, in a greater or less degree, a species of arbitrary dispensation, not to say infliction.

If this feeling could ever be driven from society—if it could ever be fully and practically believed, that disease, in every form, is the natural consequence of transgressing the moral and physical and especially the organic laws of the Creator ; and if it should ever come to be a generally received opinion, that a person in good health could no more be sick than a stone can swim or water run up hill, we should labor with more hope. However, we must toil on, hoping for the best.

A large proportion of our consumptive cases are either excited or aggravated, as we have already intimated, by colds. The philosophy of taking cold is but little understood, and the causes of this frequent but unhappy complaint, for the most part overlooked. We cannot discuss the subject freely or fully in a short essay like this. It is sufficient, perhaps, to say, that whatever gives a permanent check to the natural perspiration, may produce those effects which we call a cold, or in the language of the books, a catarrh.

This permanent check may be accomplished in several ways. It may be induced by a large quantity of cold drink taken suddenly, when we are debilitated by fatigue or excess of heat; by currents of cooler air falling upon the body, when in a very warm place and inactive; by similar currents falling upon a part of the body for some time in a warm room—as when we sit by a raised or broken window; by going out of heated rooms, perhaps fatigued, into the night air, especially without sufficient covering; by the application of cold, though it should not be inordinate, after we have been long exposed to a high temperature; and by cold itself, when continued for a long time, as in travelling too long in a stage coach during cold weather, sleeping too cold during the night, sitting with wet feet, &c.

To avoid taking cold, then, we must avoid these and the other causes which lead to it. But we may do something more than *merely* exert ourselves to prevent the exciting causes of cold; we may harden ourselves against its effects, so that these exciting causes will not operate. To this end, we should be accustomed, from early infancy, to much exposure in the open air, at all seasons. The practice of daily sponging the chest with cold water, fresh or salt, is also of great value; and should be adopted by all persons of delicate constitutions,

at all seasons of the year. Sponging the whole body with cold water, in the early part of the day, particularly at rising, when the practice is followed by warmth, increased strength and a keen appetite, is still better, as a means of hardening ourselves, than local bathings. Cold, when so applied as to produce the *reaction* we have just spoken of, is a powerful tonic to the whole system; and whatever in this way gives tone to the whole system, goes so far towards preventing our taking cold, or suffering, in fact, from disease of any kind.

4. *Plenty of good Air.*—"As the respiration of an impure atmosphere," says Dr. Clark, "is one of the most powerful causes of tuberculous cachexiæ, so is the respiration of pure air an indispensable requisite for strumous children. Indeed, without this, all our efforts to improve their health will fail. Too much attention, therefore, cannot be paid to the construction and ventilation of the child's apartment. The room in which he sleeps should be large, the air should be frequently renewed, and his bed should not have more curtains than are necessary to protect him from currents of air."

We should prefer no curtains at all. Currents of air falling on the bed should indeed be prevented; but it should be done in quite another manner. What Dr. C. has said, moreover, in regard to strumous or scrofulous children, is equally applicable to all. "Be it remembered," says Dr. Thackrah, "that mankind subsist more upon air than upon their meat and drink." The respiration—we might almost say, the *digestion*—of pure air becomes therefore a matter of the highest importance to health. The moment we inhale any atmospheric impurities, that moment does the change of the blood in our lungs begin to be more or less imperfect; whether those impurities consist in a diminution of the oxygen of the atmosphere, an increase of the carbonic acid, or in an



accumulation of other gases, and especially the impure exhalations of our bodies.—There is scarcely to be found a more subtle and poisonous agent than the gas—sulphuretted hydrogen—which is expelled from our bodies; though this, of course, is not originated in the lungs.

It is hardly possible to say too much in favor of a supply of good air, especially as a preventive of consumption. All our buildings—dwellings, school houses, shops, churches, lecture rooms, &c., &c.—should be regularly and faithfully ventilated. Especially should unwearied attention be paid, in this respect, to our sleeping chambers, our shops, and our school rooms, in which we are under the necessity of passing so many hours of every day of our lives. The evil tendency of the bad air of our shops and school rooms is greatly increased by its elevated temperature. For want of attention to this subject, and for want, too, of a due supply of exercise—joined, perhaps, to the habit of going out suddenly into the colder though purer air, without being sufficiently protected—ten thousands sicken, and thousands die. Our school rooms, our factories, our shops, and our sleeping chambers—to say nothing of our parlors and sitting rooms—do more to people our grave-yards, every year, than what is usually called intemperance, with all its horrors.

5. *Proper Food and Drink.*—Perhaps we have said enough of drink, in speaking of the want of health in parents, and the causes. We need only say, here, that those who wish to enjoy the most perfect health, in their own persons, to set the best and healthiest example to those around them, and to transmit the best constitutions to those who are to succeed them, through all possible generations of time, should be careful to confine themselves, as much as possible, to nature's best, if not only appropriate article of drink for man—pure water.



Of food, in reference to the prevention of scrofula and consumption, Dr. Clark and other writers say much, but their testimony does not, in every respect, coincide. In two points, however, do they all agree, which are, in confining those children who are in the least suspected of a predisposition to these diseases, for two or three of their first years, to a diet exclusively of milk and farinaceous vegetables, and in directing persons of this description, of every age, to use food which is plain and unstimulating. Crude vegetables, indeed, they do not recommend; but the various preparations of rice, wheat, corn, oats, barley, potatoes, beans and peas, with the mildly acid and moderately sweet fruits, are considered as indispensable. These, while they answer nature's purposes, in every possible respect, produce less hurry or disturbance in the vital functions, than flesh and fish, and those common dishes of fashionable tables which are high seasoned or greatly concentrated.

Food and drink of every kind, for those predisposed to consumption, should be cool. So long has common sense understood this, at least in part, that every one warns the consumptive against indulging too freely in hot food, such as hot bread or biscuit. But they should not only avoid indulgence, they should not use it at all.

6. *Physical and Moral Purity*.—A writer in the Boston Medical and Surgical Journal—Dr. Gold—about three years ago, insisted strongly on the tendency of physical indulgence to pulmonary consumption. His remarks are as follows—"In a thousand instances, may we trace back this disease to effeminate HABITS or exhausting INDULGENCES, which have wasted the energics and enfeebled the general tone of the system. The period spent in the nursery is an important one in regard to the future health of the individual. Such a place is too frequently like a hot bed, where nature is forced from its ordinary course, producing

an imperfect assimilation of parts, a laxity of fibre, and a morbid sensitiveness, which render the individual unfit to withstand the unavoidable exposures of after life."

Nothing can be more just than the remarks of this writer. The indulgences and habits to which he refers, and for which a foundation is often laid in that morbid sensitiveness of which he speaks, are not confined to a single appetite, nor wholly to a single sex. Nor are they among the least efficient of the causes which are in perpetual—we had almost said universal—operation, and which tend to destroy, prematurely, all bodily vigor, and produce numerous diseases, among which stands conspicuous, pulmonary consumption.

On the subject to which we allude, even our physicians, as a general fact, are as yet but half awake; while the mass of the community are neither awake nor willing to be awaked. It is almost in vain that we attempt to rouse them, even with the astounding facts of Dr. Woodward, and the reasoning of Mr. Graham. *Our* children cannot be guilty of these deleterious practices, they say; and instead of being grateful for light and caution, they only execrate those whom they ought to bless.

7. *Proper Dress.*—We have already alluded, under another head, to the evils of long continued cold. It is necessary, then, to dress in such a manner, if possible, as to prevent such results. Whatever invigorates the whole system, increases its power to generate heat, and diminishes the necessity of clothing; and though in our climate, and in the winter, no person is able to do without a greater or less amount of warm clothing by night and by day, yet is the quantity which he needs exceedingly small, provided more than is necessary has never, at any time, been used; and provided, too, he is in perfect health, mental and bodily. Yet when there is a deficit of internal heat, it is better to add clothing than long to remain chilly.

Exercise and clothing should, however, to the robust, be nearly sufficient. The enervating tendency of artificial temperatures, especially when these temperatures are high, as is often the case in our shops, factories, school rooms—nay, even our kitchens and parlors—is not well understood; nor should we be credited, were we to endeavor to set it forth. Boerhaave, one of the fathers of medicine, avoided the heat of fires, stoves, &c., during the whole winter, even in the cold moist climate of Holland; and Bishop Cheverus, while residing for many years in Boston, kept no fire in his study, even in the intensest cold. We do not say that every one can endure this, but we do say, that the nearer we can come to it, and not be permanently chilly, the better. It is our being soaked in warm rooms and beds, and immured in shops, and factories, and school rooms, from our cradles upward, that create the demand for so much clothing; and which, in spite of all our efforts to keep warm with the aid of clothing, finally give thousands and millions of us the consumption.

Much is said on the necessity of flannel next the skin, in the cold season. If such is our occupation, such our habits, and so imperfect our health, that we cannot be always comfortable without flannel next to the skin, let it be thus used. But it is, to the healthy and robust, too stimulating, and defeats, in the end, the very purpose for which it is used; making us so tender, that we are probably losers by its use. Cotton flannel, as it is called, or indeed any sort of cotton, is better and safer for permanent use, next the skin, if we can get along with it without immediate discomfort, than any woollen materials whatever.

There is one never failing source of pulmonary disease, connected with dress, which, though often adverted to, should not be passed over. We allude to the custom of dressing in such a way as to impede the motion of the

chest. It is of comparatively little consequence what the form of the dress is;—if it hinders free motion and full expansion, it is always injurious.

Most people seem to think that dress is only injurious, when it is so tight as to prevent the bending or flexion of the whole body. That complicated motion of the lungs, which should permit them to expand when we inhale the air, they never seem to dream of, for one moment. Or if they get any ideas of injury from this source, they are very imperfect and inadequate.

We cannot, in a single short essay, enter fully into this important subject. It is perhaps sufficient to say, that every ounce of steady, continued compression upon any part of the chest, prevents the delicate organs within from doing their work as perfectly as they would otherwise do it; and that this tends to disease. Our blood can neither be made perfectly, nor properly restored after it loses any of its vital properties—which it is perpetually doing, in the progress of its circulation—unless the lungs have the utmost freedom.

Their compression is especially injurious and productive, sooner or later, of disease, in the case of those who are at all predisposed to consumption. Those not inclined to the latter complaint, will sometimes *appear* to endure compression, for many years, without injury; though a day of reckoning finally, even in their case, must come. But to those whose chests are somewhat small, and who have the consumptive structure generally, the compression of a single day, even in the smallest degree, favors more or less the development of that fashionable but dire disease of which we are treating.

Our world is most deeply indebted to those individuals, of either sex, who have labored, or are still laboring to awaken mothers—especially christian mothers—to a thorough conviction of the necessity of avoiding, in the educa-

tion of their daughters, the error to which we allude. It is productive of a thousand forms of mischief—some of them of magnitude—besides pulmonary consumption; but our business, at present, is chiefly with the latter. Would that we did not feel that on this point—one of paramount importance to almost all others—we are destined to labor in vain!

8. *Cleanliness*.—We cannot help thinking that the value of a clean skin, as a means of preventing consumption, has usually been underrated. Many people imbibe the notion that dirt, to the consumptive, is even healthful. It cannot be so. It is not so. The skin should aid the lungs in performing their office of renewing the half spoiled blood; and if it does not afford this aid, the lungs either do a part of the work which they ought not to do, and are thus overworked and injured, or the work which the skin should do, is not done at all. In the latter case, mischief must ensue in various ways; in the former case, the lungs, by being overtasked, are debilitated, and the coming on of consumption is greatly favored.

This explains why daily cold bathing, to those who are predisposed to consumption, is so useful. There is an oily substance, which is constantly exuded from the skin, and which greases it over, and in a little time impedes perspiration, unless we wash often. More than this; the dirt adheres to us, and blocks up the openings of the skin. But washing removes the oil and dirt.

The almost universal neglect of bathing and washing, in this country, is very bad for consumptive people. Varnish over one of these people, and he would soon perish; but what is the mighty difference between having a coat of dirt and grease on the skin, and a coat of varnish? We wish consumptive people—and indeed all persons—would remember this.

9. *Proper Exercise*.—Due exercise of body and mind is indeed indispensable to all; but especially so to the consumptive. By due exercise we do not, however, mean *over-exercise*; for he who, in avoiding the miseries of inaction, exercises beyond his powers or strength, is running on one rock to escape another. Let all the functions and faculties of body and mind both, be duly employed, from early life—especially the lungs. Dr. Rush, long ago, spoke of the importance of singing as a means of preventing consumption. But speaking and even reading, no less than singing, may produce the same results. If the general health of the system were properly maintained, and the lungs were at the same time exercised, daily, by conversation, reading and singing—not too long at once, too loud, or too violently—we do not believe consumption would often appear, even in those who are strongly predisposed to it. Let it be remembered, however, that just in proportion as proper exercise of body and mind both, taken as a whole, and of their several functions and faculties taken separately, is beneficial to the consumptive, so, in the same proportion, is *over-exercise*, or excess, injurious.

10. *Proper Ventilation*.—One thing which we believe to be a fruitful source of consumption, has been alluded to, under the head, Pure Air, though not with so much distinctness as its importance demands. We must be permitted to recur to it, under another head, and urge the importance of ventilation.

The common statement, that we spoil a gallon of air, by breathing, every minute, does not express the whole truth. He who is confined to the use of a gallon of air a whole minute, or what is the same thing, he who is confined to sixty gallons, sixty minutes, or to twelve hogsheads of it twelve hours, is indeed injured to the full extent which has usually been supposed.



But, as we have already said, this is not all. We are beginning to be injured long before we have spent a full minute, on our gallon of air. There is quite too much carbonic acid gas, contained in a gallon of air, ere we have *lived upon it* half a minute. Nay, more; it is not certain that we remain uninjured if we breathe over, the second time, any portion of air which has the previous instant issued from a pair of lungs, whether ours or those of somebody else. Our own opinion is, that no air which has just issued from the cavity of the lungs, should be inhaled again; and that by neglect of this rule, though it be in ignorance, thousands and tens of thousands are slowly injuring themselves, and implanting the seeds of disease in various forms, especially consumption.

To prevent this, great pains should be taken to have a free circulation of air in all our rooms, especially, as we have already said, in our parlors, sleeping rooms, school rooms, churches, &c. Unwearied pains should be taken to avoid the necessity—particularly in feeble people or children—of taking in the breath which has just issued from the lungs of another; whether it be a fellow being, or a favorite domestic animal—a horse, a dog, or a cat. Fires also, of every kind, lamps, candles, &c.—in short, *combustion of every sort*—as well as respiration, produce the results of which we have been speaking; and call equally loud on us, for careful ventilation.

11. *Avoid Medicine.*—All who have read our two last numbers, may at once see the tendency of medicine to destroy health and induce disease; but they may not so readily see why it should have a special tendency to consumption.

The truth is, it has no such special tendency. Whatever debilitates us, invites disease. The particular disease thus invited, will be that to which we are constitutionally predisposed. In the case of those who are pre-



disposed to rheumatism, that form of disease will be induced. Those who incline to gout or apoplexy will have those diseases. Those who are inclined to consumption, will have the consumption, &c.

All we can say, then, in regard to the tendency of medicinal substances to invite disease is, that they always weaken the nervous system, and exhaust, too fast, our vital energy; while they sometimes, but more rarely, implant the seeds of diseases which are entirely new. But whatever exhausts vital energy, in those predisposed to consumption, greatly favors the production of tubercles in the lungs, and the ultimate appearance and dreadful ravages of that disease.

Dr. Clark says—"Mercury, when used so as to affect the system, has been very generally considered as capable of inducing tuberculous disease. I am inclined to believe this; and therefore consider that in persons of a delicate or strumous constitution, its use requires the greatest caution and circumspection."

We should say, rather, in view of this fact, mentioned by Dr. C., that instead of using it with caution and circumspection, it would be safer to omit it almost entirely. Struma, as Dr. C. calls it, is so common now-a-days, that we scarcely know who is free from it.

But Dr. C. also thinks that hard water tends to induce consumption; though, he says it may be difficult to explain how it does so. And yet, in the next paragraph but one, he speaks, with confidence, of the general tendency of all things which debilitate the nervous system, and depress the powers of life, to produce this fatal disease!

How closely wise men sometimes approach to the truth, without discovering it! So with Dr. C., in the present case. From mercury, one of the more active medicines, to hard water, which is only slightly medicinal,

is a host of medicinal substances, *every one* of which tends, in the consumptively disposed, to produce consumption, and all in the same way; that is, impairing the general tone and powers of the system. Mercury and hard water, we may consider as the two extremities of a long series of medicines, of which most or all of us are taking one or another—some of us, many of them—every day we live. All dosing of every sort, all drinks but water, all condiments, and some sorts of food, are, in the above sense, medicines, and favor the production of tubercles and consumption. We should be trained to avoid them, on penalty of disease and premature death, except when ordered by a physician. Then they are, indeed, evils, but they are supposed to be necessary evils, and are or should be prescribed on that principle.

12. *Health of Mind.*—Hardly anything is worse for the consumptive than intense mental exertion. This operates to produce mischief in several ways. 1. It almost always involves sedentary habits; which, as we have just seen, are of themselves hurtful. 2. It is apt to produce imperfect digestion. 3. It induces constipation, and its host of evils. 4. By means of these last evils, and by other means which might be mentioned, it causes too great a flow of blood to the upper half of the system, and to the lungs among the rest. You will often find sedentary people with a hurried circulation—one of the worst things which, to a consumptive person, can possibly happen.

One reason why agricultural employments and sea voyages—indeed, travelling in general—have had so high a reputation in consumption, is because they remove us so far from the evils of sedentary habits; and because they prevent, generally, intense mental exertion. It is true, we thus secure, at the same time, the benefits of pure air and appropriate exercise in that air, which are of

unspeakable importance. But it is not true—we repeat it—that the smell of the earth, or breathing of dust, which is incident to some of these exercises or employments, is beneficial. On the contrary, breathing pure air, unmixed with dust of any sort, or noxious gas, is of more importance to the person with diseased lungs than to almost any other; and it is only when, along with this, we have so many other things which are favorable, that the person does not suffer immediately.

The grand reason, however, why intense application to study is a powerful source of consumptive disease, is because it exhausts the sensorial power, and weakens the nervous system, and thus deprives the various organs of the body, especially the lungs, of their proper share or allotment of nervous influence and energy. To have the lungs work well and change the blood properly, a strong and energetic brain are indispensable.

13. *Cheerfulness*.—This is essential, everywhere, in life; but to none more so than to the consumptive. Be not anxious—that is, *over* anxious—has, to such persons, a deep and important meaning; would that it were understood so. The heaven of this life is no more to be obtained than the heaven of the future world, till anxiety is far removed from us, and perpetual cheerfulness reigns. A few generations following each other in succession, who should contrive to maintain unremitted cheerfulness, even if other causes were to remain the same, would banish three fourths of our consumptive diseases from the world.

14. *Peace of Conscience*.—This is not easily separable from general cheerfulness. He who has the latter, will, at the same time, almost inevitably, possess the former; while he who has peace of conscience will, sooner or later become cheerful.

We know, full well, that many an individual will smile at the idea of setting forth cheerfulness as a preven-

tive of consumption, and that some will even question our sincerity. Now, be it remembered, we are in earnest. We might even go farther. True religion is cheerful; producing both health of mind and peace of conscience; and we might therefore say, in general terms, that the religion of Jesus Christ was a prevention of the disease in question. The truth is, that the Christian religion has a tendency, direct and indirect, to prevent disease of every kind. And should the time ever arrive, as we doubt not it will, when christianity shall be fully applied, as its author no doubt intended it should be, to the whole condition and renovation of man, physical and intellectual no less than moral, the greater part, if not the whole of the diseases which prevail in the world, will be banished, except from the pages of history.





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